

Brodnick et al.

U.S. Serial No. 09/661,064

IN THE CLAIMS:

1-36 (Canceled)

37. (New) An apparatus comprising:

a lead wire assembly, each lead wire having a transducer capable of receiving an ECG signal from a patient;

a portable ECG device including:

a portable, ECG monitor adapted to be connected to the lead wire assembly, the ECG monitor having a data link port and a processor to process the ECG signals from the lead wire assembly and produce standard 12-lead ECG data representative of cardiac condition of the patient; and

a wireless communication interface integrated with the ECG monitor to receive patient ECG data from the ECG monitor and transmit patient ECG data to a remote health care provider; and

an information management system connectable to the data link port of the ECG monitor to maintain ECG monitoring during patient transport to a health care facility, the information management system having data storage to maintain an ECG history that is downloadable at the health care facility.

38. (New) The apparatus of claim 37 wherein the wireless communication interface is a wireless phone capable of allowing audio and ECG data transmission concurrently.

39. (New) The apparatus of claim 37 wherein the wireless communication interface is an interactive Internet TV appliance capable of allowing voice, video, and ECG data transmission concurrently.

Brodnick et al.

U.S. Serial No. 09/661,064

40. (New) The apparatus of claim 37 wherein the processor is programmed to:
prompt the patient if assistance is needed to acquire an ECG, and if so, open a
data transmission link to the health care provider;

otherwise, receive and process the ECG signals, then open a data transmission
link and transmit the ECG data to the health care provider.

41. (New) The apparatus of claim 40 wherein the processor is further programmed
to:

allow selection of a desired transmission mode; and
allow concurrent transmission of ECG data in addition to at least audio
communication data.

42. (New) The apparatus of claim 41 wherein the processor is further programmed
to include bi-directional video and audio transmission with the transmission of ECG data.

43. (New) The apparatus of claim 37 further comprising:
an interactive Internet appliance that is connectable to a video and audio monitor
to receive ECG data from the wireless communication interface and to transmit the ECG data to
the health care provider; and
a video camera and a microphone connected to the interactive Internet appliance
to transmit video and audio data from the patient to the health care provider.

Brodnick et al.

U.S. Serial No. 09/661,064

44. (New) The apparatus of claim 43 wherein the ECG data and the audio and video data are transmitted to the health care provider through an interconnected global computer system.

45. (New) The apparatus of claim 43 wherein the ECG data and the audio and video data are transmitted to the health care provider at least partially through an electromagnetic transmission wave.

46. (New) The apparatus of claim 43 wherein the wireless communication interface includes an infrared transmitter and an infrared receiver to communicate with the interactive Internet appliance, and wherein the processor is further programmed to cause the infrared receiver to receive data instructions from the health care provider through the interactive Internet appliance.

47. (New) The apparatus of claim 37 wherein the information management system includes a processor integral with the information management system.

48. (New) The apparatus of claim 37 wherein the apparatus operates on demand from the patient.

49. (New) The apparatus of claim 37 wherein the information management system is capable of broadcasting ECG data to the health care facility as the patient is in transit.

Brodnick et al.

U.S. Serial No. 09/661,064

50. (New) The apparatus of claim 37 further comprising a GPS system connected to the wireless communication interface and wherein the processor is programmed to receive a signal from the health care provider to enable the GPS system.

51. (New) The apparatus of claim 37 wherein the information management system is operable with the processor of the ECG monitor.

52. (New) An ECG monitor system comprising:

- a remote ECG monitor having multiple leads and multiple channels to acquire ECG signals from a patient, and a data storage device to store the ECG signals;
- a remote communication interface to receive the ECG signals from the remote ECG monitor and transmit the ECG signals over a public communication system to a centralized facility;
- a local communication interface to receive ECG signals from the public communication system at the centralized facility; and
- a local ECG device connected to the local communication interface to receive the ECG signals and provide the ECG signals in human discernable form and a data port connectable to the data storage device of the remote ECG monitor to allow direct transfer of data therebetween.

53. (New) The system of claim 52 wherein the remote ECG monitor includes an infrared transmitter to transmit the ECG signals to the remote communication interface.

Brodnick et al.

U.S. Serial No. 09/661,064

54. (New) The system of claim 52 wherein the ECG signals are processed and digitally analyzed in at least one of the remote ECG monitor, the remote communication interface, the local communication interface and the local ECG device.

55. (New) The system of claim 52 wherein the remote communication interface is one of (1) a wireless phone, and (2) an interactive Internet appliance having a video camera and microphone to allow bi-directional communication between the patient and the centralized facility.

56. (New) The system of claim 55 wherein the wireless phone is integral with the remote ECG monitor and is preprogrammed with a telephone number of the centralized facility.

57. (New) The system of claim 55 wherein the remote ECG monitor includes a processor programmed to:

prompt the patient if assistance is needed to acquire an ECG, and if so, open a data transmission link to the centralized facility;

otherwise, receive and process the ECG signals, then open a data transmission link and transmit the ECG data to the centralized facility.

58. (New) The system of claim 55 wherein the data storage device includes an information management system to maintain ECG monitoring during patient transport to a health care facility.

Brodnick et al.

U.S. Serial No. 09/661,064

59. (New) The system of claim 58 wherein the information management system includes a processor and a communication system to broadcast ECG data as the patient is in transit to a health care facility.

60. (New) The system of claim 52 further comprising a GPS system connected to the wireless communication interface.

61. (New) The system of claim 60 wherein the processor is programmed to receive a signal from the health care provider to enable the GPS system.